

the os uteri was so small, that dilatation at any one sitting would not, he believed, have effected the object.

Dr. Snow did not think that the slow state of the circulation need have been any bar to the administration of chloroform for ten minutes or so during manipulation. He had given chloroform to several patients, in operations for hemorrhoids, who were reduced to the lowest state from previous hemorrhage, and anæmiated to the greatest degree, and he never saw any ill effects from the chloroform in those cases.

Dr. T. Smith asked Dr. Snow if he would use chloroform for a patient subject to repeated faintings. He once saw chloroform used for the extraction of teeth in the case of a lady who had lost a very large quantity of blood by abortion, and he certainly feared that she would die. From what he had seen in that and in other cases, he should fear the use of chloroform for a patient who had lost blood to such an extent as to be frequently subject to fainting. The patient whose case he had described scarcely passed a day without fainting.

Dr. Snow believed that a patient who was liable to fainting, would get through an operation better with chloroform than without it; but of course there was a limit to what might be done either with or without chloroform, when the patient was in an extreme degree of faintness.

Dr. Mackenzie said the author had described the case as one of complete inversion, but it appeared to him (Dr. Mackenzie) that it scarcely came within that category. The late Dr. Hamilton, of Edinburgh, published a case of complete inversion, in which, upon simple treatment, the patient was enabled to live fourteen years with little or no inconvenience. The distinction he laid down between partial and complete inversion was, that partial inversion was attended with hemorrhage, while complete inversion was not necessarily so attended. The history of the case, as detailed by Dr. Smith, brought it within the category of cases that he (Dr. Mackenzie) had seen, in which the inversion was partial, in which the body or cervix of the uteri was constricted by the os, and in which hemorrhage necessarily occurred. He had lately met with a case of inversion that ended fatally. He was not at the time aware that inversion or reposition had been effected after a lengthened period; but he found on consulting various journals that from periods averaging from three months to eighteen months or two years, reposition had been effected under chloroform without difficulty by mere manipulation.—*Med. Times and Gaz.*, April 24, 1858.

59. *Rare Case of Fracture of the Sternum during Labour, with Observations.* By Drs. F. LUCCHETTI and G. POSTA.—Two French surgeons, Comte and Martin, in the *Classical Dictionary of Medicine and Surgery*, Venice,<sup>1</sup> relate a case of transverse fracture of the sternum, which occurred in the last moments of labour in the person of Madame Pacton, aged 35, pregnant for the first time, and who died on the fourteenth day of childbed. We have had the opportunity of witnessing, though with better fortune than the French surgeons, another case of this nature which terminated in recovery, and which we publish, both on account of its singularity, and as a warning to nurse-tenders to be more careful in preparing the bed for their patients, as we believe that in the present instance the bad system adopted by the midwife contributed much to produce the accident in question.

CASE.—Signora Maria Grossi, of Rocceguglielma, in the District of Gaeta, aged 25, of a sanguineo-nervous temperament, well formed both as to the pelvis and her person generally, having arrived at the full term of her first pregnancy, began, on the morning of the first day of the present year, 1857, to feel the pains of labour, which increased gradually in frequency and intensity, until at 3 o'clock in the afternoon the period of expulsion had arrived. The patient, uniting her voluntary efforts to the spontaneous and natural contractions of the uterus and of the abdominal muscles, suddenly perceived a crash and intense pain in the antero-superior region of the chest, and in a few moments gave birth to a living female child.

<sup>1</sup> Vol. xiv. p. 70.

The expulsion of the placenta was easy, and unattended with inconvenience; however, after the labour the pain in the same region increased so much that the patient's relatives were obliged to apply for medical aid.

Although fracture of the sternum is most easily diagnosed, manifesting itself, in addition to the phenomena of disturbed respiration, by signs evident to the touch, the eye, and the ear, the accident was considered to be one of simple muscular strain, was neglected for a week, and the patient was not subjected to treatment.

The symptoms of the thoracic lesion becoming threatening, Dr. Lucchetti was called in, who, arriving on the evening of the seventh day after delivery, found the patient sitting up in bed, unable to lie down either on her side or back, nor could she, without suffering, raise her arms; her face was turgid and almost livid; her tongue was red, and somewhat loaded. There was very high fever; the pulse was hard, full, frequent, and occasionally diastolic; there was urgent thirst; the bowels were constipated; the secretion of milk was regular. Respiration was difficult and unequal, and was attended with so much pain, and such a sense of weight and oppression, as to lead to the apprehension that suffocation was imminent. The patient was tormented with a troublesome and frequent cough, every return of which renewed the sense of crashing and the intense pain in the chest, a little yellowish mucus being with difficulty expectorated. The sweat of agony appeared at uncertain intervals upon the forehead and neck, but the skin of the rest of the body was unusually dry. The seat of pain, which was precisely the middle of the upper part of the sternum, presented an elevation caused by the fracture of that part of the bone, the superior broken portion projecting, while the inferior was depressed. The shocks of the cough moved the bony fragments, and the crepitation, which is the surest indication of fracture, was audible to the bystanders; hence it was evident that the sternum had been fractured transversely in its upper part.

In the evening, an emulsion of gum Arabic with syrup of digitalis was prescribed, and several leeches were applied to the affected part. These means were attended with slight and transient relief; but great advantage was obtained during the night by a copious bleeding from the arm, as, in consequence of the diminution of the cough, and the moderation of the more troublesome symptoms produced thereby, the patient was able to enjoy a few hours' sleep.

The following day Surgeon Posta being called into consultation, also recognized the fracture, which had not yet been reduced; this was now done with the assistance of Dr. Lucchetti and a young student in medicine, Andrea Winckler, after which a suitable bandage was applied, &c.

At the end of thirty-five days we found Signora Grossi cured, a slight elevation alone remaining at the seat of fracture, produced by a strong and consolidated callus; she is now able to attend to her domestic duties.

*Observations.*—If traumatic fracture of the sternum is a rare case, it is immeasurably rare to see such an accident follow the efforts of parturition. Traumatic fracture of the sternum is the effect of the immediate action of bodies falling on this bone, breaking it, and consequently causing severe contusions of the soft parts, and usually profound disturbance of the subjacent thoracic viscera. All surgical observers have seen in fractures of the sternum extensive effusions in the mediastinum, the lungs, and the heart.

Fracture of the sternum, from whatever cause, is easily recognized, in consequence of the bone being wide, flat, tolerably long [and superficial]; its fragments are felt on very slight pressure, and the well-marked crepitus renders it impossible to doubt the nature of the accident.

In fracture of the sternum respiration is painful and difficult; troublesome cough, oppression of the chest, sanguineous expectoration, palpitation of the heart, and sometimes emphysema, are present. The patients are greatly distressed, nor can they lie on the back without producing signs of impending suffocation. Simple fractures of the sternum, such as those occurring during the pains of labour, are easily treated; the fracture being reduced, immediate local relief is obtained by covering the fractured portions with pledgets dipped in vitæ-water. A two-tailed sorrounded bandage crossed, leaving the mammae

free, is sufficient to retain the parts *in situ*. In the case of our patient the secretion of milk continued normal up to the period of cure.

The most advantageous position in cases of fractured sternum is to remain seated in bed, the head and the thorax being elevated, and the thighs flexed, so as to avoid the inconvenient tension of the abdominal muscles, which often gives rise to displacement of the portions of bone.

Absolute rest must be enjoined, much speaking is to be prohibited, and such efforts as coughing or sneezing must be avoided as much as possible. Three cushions, one at the back and two at the sides of the thorax, will be advantageous in maintaining the patient in the proper position.

Lastly, it may be asked, how can fracture of the sternum occur during the parturient efforts?—a question, the answer to which ought to be interesting, not only to surgeons, but to all obstetricians, and especially to the numerous midwives, who are too indolent, and superstitiously place their patients in strange, disadvantageous, and injurious positions.

It cannot be denied, that during pregnancy the size of the abdomen enormously distends all the tissues of the latter, and the muscles in general acquire a high degree of tension, as do all the abdominal muscles and those attached to the sternum; this anatomical condition may therefore become a concurrent cause of fracture of the bone in question. In fact, scarcely do the expulsive uterine efforts commence, when all the muscles are put upon the stretch, and the sternum is drawn a little downwards; consequently, if, instead of giving to the patient a position calculated rather to moderate this tension, she be placed in another likely to augment the downward traction of the bone, fracture of the latter, if it occurs, may be attributed to the faulty position in which the woman is placed.

Signora Grossi would not have suffered fracture of the sternum if the midwife had not foolishly placed her on the ground, or, at best, upon a mattress; and had she not, when the moment of parturition arrived, been raised upon her hands, made an effort with her arms, and counter-extension with the thoracic muscles, the abdominal muscles at the same time drawing the sternum forcibly downwards; the bone was thus immediately acted on by two forces, the one thoracic and superior, the other abdominal and inferior; it consequently gave way in its upper third, and a fracture was produced, which might have caused death. The only means of preventing the recurrence of such accidents is to warn the midwives that patients ought to be delivered in bed, and, still better, in the obstetric bed; but when this is not to be had, and if it is wished at all risks to deliver in those wretched chairs, against which every surgeon ought to exclaim, it is necessary that the midwives should at least know, that in any position the legs ought to be in a state of relaxation on the thighs, and that the thorax of the patient should be a little elevated and supported by a cushion. Without such sound principles, parturient women, especially in the country, will be in one or other mode perpetually sacrificed.—*Dublin Quart. Journ. of Med. Sci.*, Nov., 1857, from *Bulletino delle Scienze Mediche di Bologna*, April, 1857.

60. *Ruptured Uterus treated by the Free Exhibition of Opium*.—Dr. HARVEY communicated to the Medical and Surgical Society of Cork (May 13, 1857), the following interesting example of this:—

“Mary Murphy, aged 38, a spare but healthy-looking woman, was admitted into the Lying-in Hospital, stated to have been in rather strong labour of her third child for the last thirty-six hours; former labours reported to have been natural, and of about nine hours’ duration. When seen at 2 o’clock P. M., the pains were strong and frequent, and she felt debilitated. Pulse about 100, weak; bowels confined; no difficulty in passing urine; the head was found occupying the upper part of the cavity of the pelvis; presenting part cedematous, and making slow advance; liquor amnii had been dribbling away since the day before. She was ordered a turpentine enema and some broth. On being suddenly summoned, about 7½ o’clock in the evening, we found the woman in a state of great prostration; the pains had ceased, and the pulse was exceedingly rapid and weak; the head of the child had receded out of reach of the